



Neo4j Basic Queries

18.09.2024

1 Introduction

This assignment will test your ability to write Neo4j queries on a given graph. The graph is built using data from this Neo4j tutorial [Stack Overflow Questions, Answers, Tags, and Comments Graph Example](#). An updated browser guide with graph-building queries ([stackoverflow.neo4j-browser-guide](#)) and the data file([stackoverflow.zip](#)) can be downloaded from the assignment page. The browser guide contains many sample queries to help you explore the graph and learn various ways of writing Cypher queries. You are asked to implement five additional queries on this graph.

2 Graph Building

1. Create a new database for this graph. Extract all csv files from `stackoverflow.zip` and put them in the `import` folder of your database engine. Week 8 tutorial contains instructions on creating a new database and locating the `import` folder.
2. Put the `stackoverflow.neo4j-browser-guide` under the project folder. The folder can be accessed by clicking “Reveal files in Finder” if you are using macOS, or “Reveal files in File Explorer” if you are using Windows. Once you copy the file to the project folder, it will show up under the file section and you can click to open it on Neo4j browser.

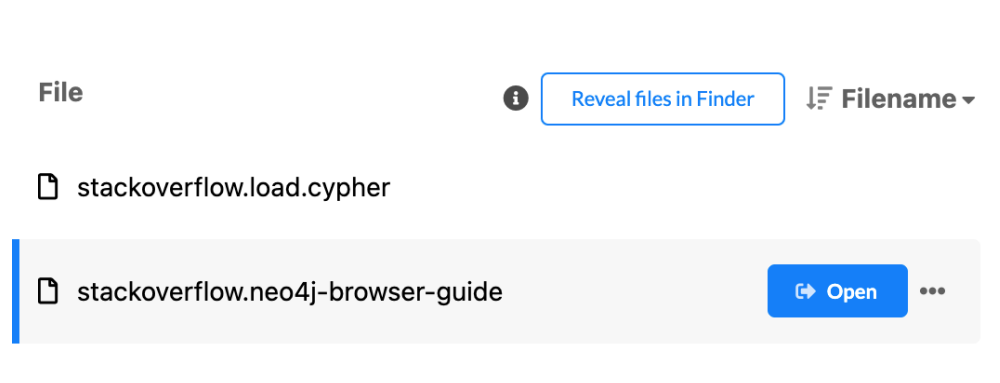


Figure 1: File Section of Neo4j Desktop

3. After successfully setting up the browser guide and the data file, you can run queries on the import data slide to build the graph and explore it with the sample queries in other slides.

3 Queries You Need to Write

- Q1 Write a query to find the number of questions with more than one answer but no accepted answer.
- Q2 Write a query to find the first question that has been asked, answered and commented on by the same user; return the question creation time in yyyy-mm-dd hh:mm:ss format, the question's title, and the user's name.
- Q3 Write a query to find the top 5 tags excluding 'neo4j' and 'cypher' of the questions with no accepted answers.
- Q4 Write a query to find the top 5 users based on the number of accepted answers they provide; return the user's name, the number of accepted answers they provide, a list of unique tags for the questions [where their answers were accepted](#) and the average score of the accepted answers they provide.
- Q5 Write a query to find all users who have provided at least two answers where all answers provided have been accepted and at least one of these answers has a score greater than 0; return the user's name and the number of answers they provide sorted by the user's name.

4 Deliverable and Submission Guideline

The deliverable of this assignment is a single text file. The text file should be named using your UniKey. The file extension should be cypher. Put all five queries in this file delimited by comment lines. You can use `wk7_solution.cypher` as an example.

The submission deadline is week 9, 27 September 2024, 23:59 Sydney time. Late penalties apply for late submissions. Note that this is a short-release assignment. Simple extensions are not applicable.